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BULLETIN of the
MENNINGER CLINIC

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EDITORIAL NOTE

In January 1943, the editors of the *Bulletin* presented the first of a series of issues devoted to the special relations of psychiatry to other medical and surgical specialties. The present issue is another in that series.

The thesis of psychosomatic medicine can be formulated in various ways. The editors defined it in the issue of January 1943 as the conception of the individual as a psychological-chemical-physical-social unit, and not as he is so often regarded by the strict organicist in medicine, a personality owning and operating a body which, like his automobile, may get out of order and require the services of a physician. The psychiatric point of view, which also finds acceptance by an increasing number of physicians who are not themselves psychiatrists, is that everything that happens to the individual and all of his reactions to what happens to him have psychological as well as chemical and physical aspects. Medical tradition is so rooted in anatomy, chemistry and physiology that the psychological aspects are often considered irrelevant and unscientific, but psychology has now made progress to the point that physicians can no longer decline to use it any more than they can decline to use the discoveries of physics in the use of X-rays and isotopes.

Contributions to our knowledge of the interaction between the emotions and the organs of human beings are multiplying rapidly. New set-ups in medical schools, hospitals, and clinics are making possible a cooperative approach to the patient by psychiatrists and internists. This outlook is yielding material of great value; it is also improving the therapeutic management of patients. At the Winter Veterans Administration Hospital there are 15 psychiatric residents assigned to the medical service, and all or nearly all medical cases are studied by both medical residents and psychiatric residents, by staff and consulting psychiatrists as well as staff and consulting internists. Similar arrangements for integrating the psychiatric and medical approaches exist in many other places.

The Editors of the *Bulletin* would have liked to present in this number some joint studies of patients made cooperatively by internists and psychiatrists. This was not possible, however, because we are still in the process of learning how to integrate and report such studies. Instead, therefore, we are submitting the observations and conclusions of four psychiatrists and one pathologist with respect to a variety of medical problems. In each instance the collaboration of medical staff colleagues is implicit.

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THE PSYCHIATRIC HISTORY IN THE TEACHING OF PSYCHOSOMATIC MEDICINE*

By SIDNEY RUBIN, M.D.†

"There is a habit of speaking of psychosomatic diseases as if some diseases were not psychosomatic. Similarly, some people think of psychosomatic medicine as a specialty dealing with a limited group of diseases like dermatology and ophthalmology. But, as a matter of fact, psychosomatic is merely an adjective describing a conceptual approach to the human organism and all its ailments, though perhaps more essential in the diagnosis and treatment of some patients than of others."[1]

This quotation represents the so-called broad concept of psychosomatic illness, emphasizing the correlative aspect of the psychosomatic approach. The scope of a paper on the teaching of this approach to psychosomatic medicine could take in an almost limitless area of medical teaching and might well consider contributions from such disparate fields as embryology and anthropology. The author proposes to limit this discussion to some of those aspects of medical teaching which relate more to the approach itself than to disciplines involved, and to consider some of the practical applications of these concepts with a group of psychiatric residents on a medical service in a teaching hospital.

It is important to stress the factors which operate when such an amalgamation is made, i.e., psychiatrists and advanced psychiatric residents grouped together on one ward with internists and advanced medical residents.

Convention, practicality, and certainly unconscious motivation have developed the technique of "consultation" by which the patient is passed on successively from one specialist to the other. By this device, one consultant does not ordinarily overlap the other in the consideration of that piece of the patient which is his special preoccupation. In essence each specialist pursues his activities in a certain "splendid isolation." He inscribes his findings on a probably already bulging chart and dismisses the patient, retaining perhaps only a slight awareness that the patient is something more than a collection of organ systems and structural units.

On the "psychosomatic" teaching service, however, the attempt is made to avoid dealing with the patient in this fragmented fashion, and to see him for what he really is; i.e., a human organism reacting to and on an

* Published with the permission of the Chief Medical Director, Department of Medicine and Surgery, Veterans Administration, who assumes no responsibility for the opinions expressed or the conclusions drawn by the author.

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environment which has extensions inward as well as outward. To this end, the concept of the psychosomatic history serves a very useful function.

The first aim in the obtaining of a psychosomatic history is the delineation of the personality as a whole. This implies a consideration of the heredity, constitutional and physical status, and reaction patterns both physiological and psychological. It requires a viewing of these patients from various angles with an eventual superimposition of each view on the other, leading to the ultimate development of a composite picture.

It is possible to derive the information for this kind of historical survey of a patient by a number of approaches. By training and tradition the data are ordinarily obtained by a question and answer procedure. Such a technique has the obvious advantage of accumulating material, relating, insofar as the patient is able to tell, to those details which he and his physician have come to recognize as the factors operative in the causation or progression of his disease.

What is not immediately apparent in this kind of gathering of data is that what the patient is giving his physician, and equally what the physician is asking of his patient, is material which relates not to the actual illness but to their own special concepts of the illness. In other words we obtain from the outset a prejudiced report by a biased observer. Whether the information is more colored by the patient's giving only those factors which he thinks are of significance or more by the physician asking only for those details which he thinks are of significance in the illness is unimportant. The resultant picture is no more accurate as a reproduction of the true picture of the disease than would be a naturally bright-colored landscape viewed through a color filter. The object of the psychosomatic history is to eliminate as completely as possible the filter and to allow a clear and undistorted picture to come through to the physician.

What is referred to as a prejudiced report is a picture of the patient which does not take into consideration those factors, both conscious and unconscious, which cause significant material to be withheld or distorted. Frequently it is just this material which is of crucial importance in giving us a real understanding of the patient, his present conflicts, his early life experiences and the methods which over his lifetime he has developed to shelter himself against a hostile inner and outer world.

For the purposes of this paper, it will be assumed without further elaboration that bodily changes may be brought about by mental stimuli and emotions just as effectively as by bacteria and toxins, and that physiological changes accompanying emotion may disturb the function of any organ[2]. As Alexander[3] states it, "A vegetative neurosis is not an attempt to express an emotion but is the physiological accompaniment of constant or periodically recurring emotional states."

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The inadequate expression of emotion or of emotional conflict is most likely to occur when these arise from "unreal" or "internal" situations of danger. The physiological responses to an imagined attack may be identical with those of a real attack except that the former are potentially more dangerous somatically because they are less likely to be appropriately expressed in action.

Hence in a study of a patient's illness we are most interested in the features which contribute to the way he feels emotionally, the psychic traumata to which he has been exposed and the ways in which he has defended himself against the awareness of his inner feelings. In developing the psychosomatic history, we are constantly interested in the features which illustrate the unconscious aspects of the psychic structure of the patient. The investigative method *par excellence* for uncovering these unconscious parts of the personality are methods developed by psychoanalysis.

When the psychiatrist of the past leaves off his preoccupation with descriptive phenomena and takes up the tools of dynamic investigation and thinking, it becomes possible for him to understand what the patient's illness really "means," both as an expression of a hidden conflict and as a measure of the patient's efforts to defend himself against the pain that would result from a recognition of the factors of the conflict. Emphasis, therefore, in the gathering of the psychosomatic history is placed not on answering questions or proceeding in a definite direction. The patient, in a large measure, is allowed to pursue the development of the story of his illness in his own way. It is of paramount importance, of course, to avoid the types of comment that could lead the patient to suspect that the physician takes any particular attitude other than that of the interested listener.

The spontaneous productions of the patient become items of greatest significance. Dreams and associations to them, gestures, slips of the tongue, etc., are, in addition, important details which give us a picture of the patient's personality structure and hidden conflicts which can be obtained in no other way. These have as much determinative value to the investigating psychiatrist as have the fine signs of cortical localization to the investigating neurologist. The emphasis in the accumulation of significant data in the psychosomatic history is placed on the uncovering of material by way of an associative procedure following psychodynamic thinking. This allows for the verbalization of superficially and also sometimes deeply repressed material.

While a classical uncovering technique is not possible, nor is it aimed for, an effort is made to develop the use of these principles to elicit relevant unconscious material. The crucial factors of transference and countertransference are stressed in the learning and application of these procedures in working with patients.

It is of great importance to study shifts from psychic to somatic mani-

festations and vice versa in the patient's life history. As the resident psychiatrist gradually develops skill in eliciting and amplifying the psychosomatic history, he becomes aware of a number of unexpected findings. He usually notes first that the history he has taken tends to be lop-sided, that is, "to bulge" in one or more directions rather than to develop equally in all areas.

With the increase in lop-sidedness, his tendency is to attempt to channel the verbalizations of the patient by a series of direct questions. Along with this the psychiatrist feels an increasing anxiety or frustration when the patient seems to be getting further and further away from the immediate and pressing problems of the illness.

One of the more difficult tasks in the teaching of psychosomatic medicine is to be able to indicate when it is proper to allow the history to develop without interruption and when, if ever, to guide the patient's productions. The physician has to learn to determine this by careful observation. It is easier and less likely to be traumatic or damaging to the patient-physician relationship to interrupt the stream of thought when the patient's emotional focus is less acute and when his tension is not high.

With increasing experience the student is able to apply this precept meaningfully and also to learn when it can be or should be disregarded. The student also notes as he continues to use the psychosomatic history that areas are opened up by the patient with complete surprise. The patient feels either that he would never speak of this material or that it is material of which he had been completely unaware.

When "surprise" material comes to the forefront it can frequently be made clear to the student that by this technique he has not only been eliciting historical material but that other factors have been in operation. In essence, he sees that some of the patient's resistances have been removed and that repressed material has been verbalized. It can thus be made clear that the development of the psychosomatic history is not only an anamnestic procedure but is also a therapeutic procedure.

The production of emotional material by the patient, in a certain sense, goes on for the entire duration of treatment. A real psychosomatic history is not fully disclosed until the end of treatment has been reached. What has been revealed is not a static picture of the patient and his illness but a picture of the individual as an adult and as a developing adult. Thus it becomes apparent that an understanding of the present illness is meaningless in a temporal framework involving only the present and recent past; it must include the only meaningful framework, i.e., the patient and all his experiences.

The resident psychiatrist may then be shown how an illness of the present is only the visible part of an iceberg, the whole of which is a grosser distortion of the personality. The genesis of this distortion and its evolvement

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can only be understood and thoroughly modified by a careful and extended look into the whole development and experience of the sick individual.

The resident comes to know that the therapy of psychosomatic medicine calls for a careful understanding of the principles of the physiologic expression of emotional tensions, and what he is dealing with is a rather specific kind of shorter psychotherapy. The aim of this kind of psychotherapy is not a basic change in the character structure of the sick person (although this can sometimes occur); it is an amelioration of symptoms or at least their abortion. The desired goal is the breaking and the prevention of the redevelopment of a vicious cycle which leads to irreversible tissue damage.

In addition to the interview method, it is constantly pointed out in teaching, that there are other therapeutic modalities available. The usefulness of "milieu" therapy is stressed and its use is encouraged. The ward and the hospital are microcosms which duplicate in many ways the world from which the patient came. Exposure of the patient to this miniature world, and the study of his relations to it, can be immensely useful in the understanding and the therapy of the patients.

To this end also direction is given to the organization of the service and the wards around the concept of the ward team. The psychiatric "captain" gets an opportunity to see the response of patients to a set-up in which all people who affect the patient are working together toward specific goals under specific guidance. The resident is constantly made aware of the value of observing the patient in this (at least partially) controlled environment and the opportunity which he has to modify the environment and observe the effect of these modifications on the patient.

Summary

Some of the problems related to the teaching of psychosomatic medicine to psychiatric residents on a general medical service have been considered. The importance of the psychosomatic history and its proper development has been discussed. Such a history can best be developed by using a psychodynamic orientation and following a somewhat flexible associative technique. This kind of history taking is in itself a therapeutic process, a type of psychotherapy, so that the history ends only when the treatment of the patient ends. The treatment, however, includes other tools, of which "milieu" therapy and the "ward team" have been described briefly.

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EMOTIONAL FACTORS IN THE PATIENT WITH DIABETES MELLITUS*

By I. ARTHUR MIRSKY, M.D.†

Diabetes mellitus has been studied more extensively than any other metabolic disturbance, yet, insofar as man is concerned it can only be defined as a clinical syndrome with a characteristic group of signs and symptoms which are associated with hyperglycemia and the resultant glycosuria as well as other manifestations of abnormal carbohydrate, fat and protein metabolism. There is little doubt that this syndrome is the result of a disturbance in the dynamic equilibrium of the intracellular enzyme systems which are responsible for the metabolism of foodstuffs, but the precise mechanism of this imbalance is still unknown.[1]

Normal metabolism is dependent upon the efficiency and interdependent activity of three regulatory mechanisms; viz., the intracellular enzyme systems, the endocrine system and the nervous system. A disturbance in the integrated activity of any one of these will reflect itself in changes in the others. Consequently, the enzymatic disorder which is responsible for the development of the metabolic abnormalities in diabetes may be due either to a primary disturbance which originates in the cell itself or may be secondary to an insufficiency of insulin. The insulin insufficiency can result from derangements in the integrated activity of the humoral and nervous regulatory mechanisms that induce either a decrease in insulin production by the pancreas or an increase in insulin destruction by the tissues.

Irrespective of whether the intracellular disturbance is primary or secondary, the end result is an increase in the rate at which glycogen is converted to sugar. Furthermore, the enzymatic disequilibration results in an increase in the mobilization of fats and proteins from the depots to the liver and their degradation and conversion to glucose, acetone bodies and other intermediary and end-products. Thus, the result of the imbalance is an impoverishment of the tissues, especially the liver, with respect to glycogen while the blood becomes rich in glucose.

Most students of the subject are in accord with the concept that hereditary factors are of prime importance in the etiology of diabetes whereas obesity, infection, trauma and emotional and other stresses are precipitating causes. In other words, the susceptible individual is born with a limited

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capacity in the efficiency of one or more of the regulatory mechanisms but he succumbs only after exposure to a sufficiently intense or prolonged appropriate stress. Colwell's[2] observations are in accordance with this. He concluded that diabetes actually begins about the time of birth irrespective of the fact that only much later in life may it become apparent clinically.

Cannon's[3] classical demonstration that fear and anxiety can produce glycosuria in the normal cat and human gave impetus to the hypothesis that emotional stress may produce a disturbance in the carbohydrate metabolism even in the non-diabetic. However, the preponderance of more recent evidence indicates that although "emotional glycosuria" can be induced in the majority of non-diabetic subjects by exposure to an acute emotional episode, a significant rise in their blood sugar concentration does not occur at the same time. In other words, although normal subjects can develop "emotional glycosuria" they do not develop "emotional hyperglycemia."[4] Consequently, it is probable that the "emotional glycosuria" is due to a decrease in the reabsorption of glucose from the kidney tubules caused by the vasoconstriction of the peritubular arterioles that occurs under emotional tension.

Apparently, when the physiologic mechanisms, responsible for the maintenance of the blood sugar level are adequate there is a rapid compensation for any changes induced by the emotional reactions of an individual. In the diabetic where the regulatory mechanisms are already disturbed, this spontaneous equilibration is impossible. Therefore, it can be anticipated that any emotional upheaval will induce an exacerbation of the metabolic disturbance of the diabetic. Actually, this observation is so common that most clinicians have taken it for granted. It is probable that such aggravation of the diabetic state is due to an increased breakdown of liver glycogen, which in turn can be attributed to an activation of the autonomic nervous system and the secretion of epinephrine. This is in accord with Cannon's "Emergency Concept" and may be the mechanism responsible for the fluctuations which occur from day to day in the diabetic subject.

It is with reference to the role of emotional tension in the genesis of diabetes that much controversy still exists. It is conceivable that non-diabetics, who have some real or potential inadequacy in their physiologic regulatory mechanism may develop a temporary or a permanent hyperglycemia only after the forces of the environment have become relatively excessive, as with the advent of some psychologic trauma and the revival of some infantile conflict. Most clinicians have seen many non-diabetic subjects who develop hyperglycemia, glycosuria and even diabetic sugar tolerance curves when they are exposed to a variety of psychological or physical stresses but who show no evidences of any abnormality when the

stressful situation is alleviated. Such individuals undoubtedly have limitations in the regulation of carbohydrate metabolism which are not of sufficient degree as to collapse completely under the particular strain. It is possible that prolonged and repetitious excitation may prove so stressful to such persons that a permanent failure of their relatively inadequate physiologic systems may occur and diabetes mellitus will ensue.

The mechanism whereby chronic psychic tension may induce such failure is offered by Selye's[5] description of the "Adaptation Syndrome." Selye has observed that practically any non-specific noxious stimulus will induce profound morphologic and metabolic disturbances due to excessive stimulation of the adrenal cortex. More recently, Long and his colleagues demonstrated that any noxious stimulus which produces stimulation of the adrenal cortex does so only by initiating a chain reaction. This consists of stimulation of the autonomic nervous system, stimulation of the adrenal medulla, increased secretion of epinephrine, stimulation of the anterior pituitary by the circulating epinephrine, increased secretion of various trophic hormones of the anterior pituitary and finally stimulation of the peripheral endocrine glands with an increase in their hormone secretion. The resulting hormonal imbalance can induce marked metabolic changes which may then be responsible for the development of permanent diabetes mellitus in the susceptible person. It is quite possible that chronic psychic conflict may act in a similar manner.

Most authorities concede that psychologic factors play a role in the course of diabetes but dogmatically insist that such factors do not play a role in the genesis of the disease. They offer the fact that the severe emotional traumata of the battlefield only rarely result in the development of diabetes. The fact that such, and other equally severe traumata, occasionally do induce the development of diabetes is disregarded because the incidence is statistically insignificant. However, the intensity of the psychologic trauma is not as essential as is the soil upon which the trauma impinges. The character of the soil is dependent upon its previous development—and that cannot be measured statistically. The tensions associated with conscious reaction to a trauma can be verbalized or expressed in motor activity, but the tensions produced by the activation of repressed unconscious conflicts cannot do so and therefore seek indirect expression through the vegetative nervous system. Consequently, it is only when the trauma reactivates some infantile neurosis and thereby releases more primitive patterns that one may expect the development of sufficient internal stress which will induce diabetes mellitus in the individual with physiologic systems of limited capacity.

It would be pertinent at this point to distinguish the psychologic factors which may play a role in the genesis of diabetes mellitus from those which

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are the result of the metabolic disease. However, such a distinction is extremely difficult since the information concerning the personality make-up of the patient usually can be obtained only after diabetes has developed. Dunbar[6] has attempted to make such a distinction by means of the anamnestic method and by the study of the personality "profile" obtained in that manner. She concluded that from early childhood and before the onset of the disease, diabetic patients have had difficulties in making the adjustment which is essential before one can progress from the infantile dependent state to the more mature independent one and that consequently such individuals vacillate from one attitude to the other, the impulse towards independence being asserted mainly in words and only very little in action. Paralleling this difficulty is an inability to attain a mature psychosexual development. She found that the diabetic group is more passive than active; that oral preoccupation and a tendency toward masochism are fairly commonly associated; that the focus of their conflicts is the problem of sexual identification; that their major characteristic is their indecisiveness and that ego function is so weak that they suffer from intense anxiety until the disease appears.

In a similar study of diabetic children, Bruch and Hewlett[7] observed that one-third of their cases developed the disease at the time of a disturbance of family relationships, such as divorce, separation, etc. They found that many diabetic children have a tendency to compulsive behavior and a certain putty-like submissiveness, while others fight back, although often through a passive, sabotaging kind of behavior. These authors could find no specific personality type.

The procedure that Dunbar employed usually reveals the defense of the patient rather than the conflicts which may be specifically related to the genesis of the disease. This can be accomplished best by methodology which will reveal those unconscious conflicts that develop during the first few years of life and are repressed during childhood. Psychoanalysis is such a method but the literature reveals only a few diabetic subjects that have been investigated in this manner.

Dunbar[6] reported the analysis of a psychotic man aged 29 who developed diabetes five years after his treatment was interrupted. His pattern was similar to that which she found typical of the whole diabetic group. Daniels[8] psychoanalyzed a 33 year old business man and concluded that his diabetes could be attributed to a chronic anxiety which was associated with unconscious infantile fears of being overpowered and injured because of hostile rebellious and sexual strivings. Meyer, Bollmeier and Alexander[9] studied 2 cases, a male and a female, and observed that both patients had unusually strong tendencies to receive and be taken care of. These patients "retained an infantile dependent and demanding attitude and felt

frustrated because their demands for attention and love were out of proportion to the reality situation of an adult and consequently they were never adequately satisfied. To this frustration the patients reacted with hostility. Diabetes developed when these infantile wishes conflicted with the demands that were frustrated." In two patients now being studied as part of an extensive investigation by the Chicago Institute of Psychoanalysis our findings are in general accord with the above-mentioned conclusions of Meyer, Bollmeier and Alexander. Like them, we noted that the basic conflict is one related to the frustration of intense infantile wishes to be cared for. More precise correlations as to the specificity of the conflict must await further study.

As was mentioned at the outset, there are a number of precipitating causes of diabetes mellitus in man. If the psychologic factors are of importance in the causal chain, then their influence may be apparent by an examination of the other precipitating causes. The most important of these is obesity; nearly 75 per cent of diabetic patients present themselves with a history of obesity of variable duration and degree. However, obesity itself cannot be the cause of the diabetes since only about 5 per cent of obese patients develop diabetes. There is ample evidence that obesity produces an increased demand for insulin. When the pancreatic capacity is adequate the increased demand for insulin is compensated for. In those in whom the rate of insulin destruction or utilization continues to be excessive and beyond the capacity of the regulatory mechanisms, obesity will result in a relative insulin insufficiency and diabetes will ensue.

It has been established conclusively that irrespective of the presence or absence of any associated physiological disturbances, the immediate cause of obesity is overeating or underactivity. Overeating usually is the result of some disturbance in the emotional development of the individual so that he reacts to a frustration in the present by withdrawing to a behavior which was more gratifying in the past. This can be traced to that time when the infant was dependent upon being fed by some other person in order to satisfy his physiologic requirement for food. The satisfaction of this requirement relieved the tension of hunger so that food, or being fed, became associated with a pleasurable sensation as it did also with other pleasurable sensations such as warmth, support, odors, and the soothing aspects of the person who provided the food. As a result of these experiences, eating came to mean something which is inseparable from the relief of tension, the acquisition of affection and other pleasurable feelings, an association which is never completely abandoned but remains to some degree in all persons.

If an infant has been overindulged with respect to food, or if he has been given excessive satisfactions in consequence of the parents' attitude to-

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wards food and its significance, he may become reluctant to relinquish this early phase of development for a more mature one. Thereafter, he automatically returns to it whenever he encounters a situation which is unpleasant or frustrating. On the other hand, if an infant's earliest tensions were not relieved adequately, i.e., if he were never entirely satisfied in his demands for nourishment and care, he may have never outgrown his insatiable need for food or for being given things and will persist in his attempt to receive that satiation of which he was deprived. Thereafter, such an individual may relieve the tension, induced by the frustration of his desires, by eating.

The establishment of an insatiable need for being given food, for being given things or for affection is the result either of the parents' attitude toward food or the child or the result of some other environmental trauma. However, if it is true that diabetes mellitus starts at birth, even though it may not become apparent until much later, then it is possible that the new-born child may have an awareness of this potential biologic inadequacy and in order to insure his biologic integrity he may develop dependent needs of such intensity as are impossible to satisfy. A similar phenomenon is observed in the increased appetite for salt in the patient with adrenal insufficiency, or the self-selection of a high salt intake by the adrenalectomized rat.

The obese patient's effort to deny to his consciousness the reality of his frustrations may express itself not only as the utilization of an infantile mode of gratification but, in severe cases, he may withdraw also from all interpersonal contacts and return to that period of his emotional development when he was both the source and the recipient of love.

The onset of diabetes mellitus, like any chronic disease, can produce profound psychologic changes in patients as well as in the various members of their family and social groups. Thus, their pride may be hurt, their fears and feelings of inadequacy may become exaggerated, their need to be taken care of by others may become intensified and their feelings of aggression and of hostility may be aroused or stimulated. In other words, such patients may show a great emotional reaction to the onset of the disease. Due to the intensity of their own critical conscience or to the realities of their environment, or to the reactions of their families and social groups, many may attempt to compensate for their emotional reactions: fear may be expressed as indifference, feelings of inadequacy as boastfulness or belligerence, the need to be taken care of as aggressiveness or independence, the hostility as a depression or self-injury. Hence, it is not surprising to note that in the diabetic the reaction to the onset of the illness may vary markedly from that of psychotic, depressive and hypochondriacal trends to one of helplessness and apathy. The apathy and lack of volition

that is noted so frequently in the diabetic may reflect an adaptive behavior which will result in conservation of energy.

Alexander and his group noted that the glycosuria of their patients increased under the strain of the conflict between their infantile wishes to receive, to be taken care of, and the demands of the adult's environment to give and take care of others. Withdrawal from the conflict into self-pity and passivity was associated with a decrease in glycosuria. In the patients that we have studied, we noted also a correlation between the glycosuria and the psychic tension which resulted from the increased aggressive demanding attitudes of the patient, which in turn, could be attributed to the frustration of his receptive needs.

Although the excessive desire for food represents a regressive response, it may be indicative of an old conditioning. It is interesting to note that the infant, like the diabetic, cannot retain adequate amounts of glycogen in his liver. The child's inability to retain glycogen is due to a physiological immaturity and is reflected in his need for the frequent feedings provided by the loving parent. The adult's inability to retain adequate stores of glycogen is due to a physiological derangement which cannot be compensated for by frequent feedings but which nevertheless, because of infantile conditioning, may be associated with an increased need for the same gratification. Obviously that is impossible and consequently may be the source of much frustration and further regression.

There are those who believe that it is essential to restrict rigidly the diabetic's intake so as to render him aglycosuric, whereas others advocate that the diabetic may eat whatever he wishes so long as he remains free from acetonuria and clinical symptoms. In the light of the psychodynamics of diabetes mellitus, this controversy is a sterile one. The conservative group gives little attention to the fact that a restriction of diet, in terms of calories or grams, means more than a restriction of food, for with it goes the prohibition of the gratification of infantile pleasures and an intensification of basic insecurities such as the diabetic is bound to develop with the realization that he is different from others in his environment. The physician who is a rigid disciplinarian in the regulation of the diabetic may assume the role of a punitive rejecting parent and thereby either aggravate the patient's existing rebellion and resentment of parental authority or induce it if it is dormant. Yet, if a free diet means overindulgence and the production of obesity, it is just as harmful as is the restricted diet. The overpermissive attitude of the physician may be interpreted as disinterest and may induce hostility and guilt. The obesity may even produce a further aggravation of the physiologic derangement.

Essentially, the physician should treat the urine less and the patient more. He should be concerned with the amount of calories the patient

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retains rather than the amount that the patient eats or excretes. The proper use of insulin permits this on a normal diet. Even with the "free diet" the physician cannot shirk his responsibility since giving a patient freedom insofar as choice of food is concerned is of little avail unless at the same time, the patient is also handled sympathetically. Given an opportunity to mature emotionally, the diabetic patient will confront his wishes and his frustrations and make such compromises as are more consistent with both his chronologic age and social milieu. Then, he will act and eat as a normal individual and neither harm himself nor his environment.

In conclusion, it must be emphasized that diabetes mellitus in man may result from a relative failure in an individual's attempt to adapt physiologically and psychologically to the stresses of his environment. The physiologic integrative mechanisms are of variable capacity and are predetermined chiefly by genetic endowment. The psychologic integrations are likewise of variable capacity but are predetermined chiefly by environmental influences. The response of the total organism thus becomes dependent upon genetic and environmental factors. The interplay of these factors may make impossible the delineation of the physiologic from the psychologic basis of diabetes mellitus.

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PSYCHOLOGICAL FACTORS IN ESSENTIAL HYPERTENSION*

By LEWIS L. ROBBINS, M.D.†

Essential hypertension has long occupied the attention of physicians because of its great incidence. It is responsible for the death of one out of every four people above the age of 50, as well as many others below this age yet our present knowledge of its etiology and treatment still leaves much to be desired. The vegetative nervous system, the kidneys, the endocrine glands, race, climate, constitution and heredity have each been indicted as the primary criminal and, although considerable evidence has been brought to bear against each of these defendants, none has yet been found guilty.

It has long been well known that there is a strong correlation between emotional factors and the level of blood pressure, and many authors have considered the role that psychological conflicts seem to play in essential hypertension. It has been pointed out repeatedly that the early symptoms of hypertension are often psychoneurotic, and the relation of emotional stress to the onset and the aggravation of this illness has frequently been observed. In the past 10 years or so there have appeared in the literature a number of articles concerning this phase of the problem, dealing with individual cases and series of cases of people suffering from hypertension, on whom careful psychological studies have been made. While it is still too early to establish a completely definite role for the psychological factors in hypertension, it has been rather striking that the many articles appearing in the literature show a marked consistency in their findings regarding the psychological conflict in hypertensive patients.

It is generally agreed that hypertensive patients do not suffer from any specific neurosis, but do display, on careful examination, a history full of considerable emotional conflict and maladjustment. The many studies, as mentioned before, indicate that there is a more or less specific type of personality conflict found in hypertensive patients. Careful control studies of groups of patients with other somatic and psychiatric illnesses, and of normal groups of people, reveal that the psychological disorders found in hypertensive patients differ largely from those other groups.

It is the purpose of this paper to summarize the conclusions of various observers regarding the psychological factors present in hypertensive patients, and to present two cases which have been subjected to prolonged

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psychiatric study, and which represent the two extremes of the clinical picture.

Psychiatric study of hypertensive patients by numerous workers has shown that in their early childhood such patients were generally deprived of adequate parental love and affection. This may have been manifested by direct neglect or by over-protection. As a result, these patients (as children) frequently suffered from feelings of helplessness and weakness against any kind of internal or external danger, and in turn, they developed states of fear and anxiety, not uncommonly manifested in the form of nightmares, temper tantrums, and nail biting.

In order to relieve their anxiety and establish some feeling of security these patients would tend to suppress their hostile feelings resulting from their frustrations, and try to establish a passively dependent attachment to one or both of the parents. Fear of parental disapproval in retaliation for unacceptable behavior was quite marked, as was an inability to mobilize and express their aggressive impulses.

The general adjustment of these patients in later childhood was usually maintained by their becoming characteristically obedient and submissive, trying to deal with parental authority by appeasement and ingratiation through fear of parental hostility. Furthermore, these patients would then attempt to fight against their dependent strivings by developing attitudes of stubbornness, passive defiance and spite. Thus on the one hand they were always in conflict over the opposing tendencies to express their hostile feelings, and on the other, to deny these feelings because of the fear of reprisal. Their various attempts to defend themselves against these childhood dangers were usually ineffective and resulted in considerable anxiety and chronic dissatisfaction with life.

In the face of danger either in the form of hostility of others or illness, these patients sought protection from the parents. This temporary over-protection tended to place a premium on illness and injury, thus indirectly encouraging them to seek illness as a refuge from danger and thereby reinforcing the pattern of submissiveness and suffering.

The social adjustments of these individuals as adults are usually poor, being characterized by timidity, tendency to cling to family attachments, and only superficial relationships with people outside the family. In adolescence their strivings for independence were relatively weak, and there was a general lack of assertiveness. Consequently they developed little real emancipation from the home, although sometimes they would attempt to transfer these dependent feelings to parent substitutes. Generally speaking, the childhood patterns continued through adolescence.

In their work adjustments these patients characteristically show their dependent strivings by clinging to one job which offers security, and often

remaining in relatively subordinate positions despite intellectual and other endowments which might qualify them for greater success. In their work their pattern of submissiveness and obedience continues, although at the same time they harbor feelings of resentment toward their employers, feeling that their employers require too much of them and give them insufficient recognition and security.

The sexual adjustment of these patients is apt to be dominated by their dependent strivings; for most of them sexuality is associated with ideas of cruelty, injury, and degradation. They tend to be inhibited in their sexual relationships and masturbation was either prolonged into adulthood, or after a brief attempt in some cases completely suppressed. This is often associated with strong fears of punishment and loss of sexual potency. In women the process of childbirth is often associated with fear of personal injury. These sexual conflicts are usually characterized by anxiety and guilt and there is considerable disturbance in sexual functioning, consisting of frigidity in women and premature ejaculations and relative impotence in men.

In their marital relationships these patients attempt to gain the security they had been deprived of in their childhood, and it is not at all uncommon for the marriage to be entered upon soon after the death of a parent. The marriage, in general, seldom supplies the necessary security which they seek and therefore the marital relationships are also often characterized by anxiety, suffering and disillusionment. This would generally bring about in the marital situation a reproduction of the early conflict with the parents, but despite this dissatisfaction there is a tendency to maintain the attempt to have a dependent relationship with the marital partner so that divorce is relatively infrequent. Sometimes this conflict is expressed in sexual promiscuity and alcoholism, although there is not general agreement on this particular point.

It is obvious that such individuals would be prone to acute emotional disturbances in adulthood, which frequently consist of acute anxiety states, tension states, depression, and preoccupation with thoughts of illness, injury and death. At such times, not uncommonly, there are outbursts of uncontrolled hostility for brief periods, alternating with feelings of being helpless and bewildered. Various other psychoneurotic symptoms tend to appear, but the most important common denominator lies in the fact that the acute emotional disturbances of these patients seems to be precipitated by situations in which they cannot depend, for their safety and security, on either a parent or a parent substitute.

One of the most important factors stressed by all the observers is that the hostile impulses against which these patients strive to defend themselves are usually relatively near the surface of consciousness and constantly

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threaten to break through into expression, bringing the patient into further danger with his environment.

This conflict between dependent strivings, on the one hand, and hostile, aggressive impulses on the other hand, is not uncommon in other psychosomatic disorders as well as in neurotic illnesses, but characteristic of the hypertensive patient is the fact that he is unable to relieve freely either one of the opposing tendencies. He cannot freely accept the passive, dependent attitude on the one hand, or freely express his hostile impulses and aggressive strivings on the other hand.

It is still impossible to state whether the psychological conflict just described can be considered a cause or an effect phenomenon, whether it plays a primary or secondary role in the genesis of hypertension, or whether it is a psychological expression of the general "constitutional vasomotor instability" characteristic of these people.

Case History

The first case to be described briefly is that of a 30-year-old college graduate who became extremely depressed following separation from his wife due to her emotional illness. This patient was an only child, born just six weeks after the death of a sister. As a result of the sister's death, the patient's mother tended to be extremely overprotective of him, and she stated with considerable pride that he was never out of her sight until he was 6 or 7 years old. At the time the patient came for psychiatric help, his mother who had always been an extremely nervous individual, was suffering from an agitated depression. The patient stated that he was always annoyed by his mother's over-attention but never did anything about it. The patient's father was an extremely rigid individual, who never permitted himself to be close to his son despite the fact that the patient enjoyed his company. The father tended to leave the rearing of his son entirely in the hands of his very neurotic wife, but when the patient reached adolescence the father took a more active role in his rearing by being very strict with the patient in matters regarding work, money, etc.

Because of the mother's inability to nurse the patient after the first 2 or 3 months, he was placed on a formula but had considerable colic until the proper formula could be found. Toilet training was rather rigorous and constipation developed early, with resultant frequent use of enemas.

Extremely early in life the patient exhibited a marked dependence on his parents and was very shy and timid. He was never away from home without his parents, and in fact, slept in the parental bedroom until the age of 15, although this was not necessitated by any economic stringencies. As an infant he showed marked fear of the dark and could not fall asleep unless he could touch some part of his mother's body.

Although his general achievement in school was a little above average, his social adjustment was very poor and his shyness and timidity continued. He chose for his college major a subject which would permit him to avoid classroom recitations, which always made him nervous. His work adjustment, upon the completion of college, was relatively poor, and he had considerable conflict with his father over this. Generally he obtained positions far below those for which his college training and intelligence qualified him. Finally he obtained a civil service position at a rela-

tively low salary, which work he continued until the time he came for psychiatric help.

The patient's sexual adjustment was always poor, and masturbation which began at the age of 12, continued until marriage. He was constantly fearful that this would lead to some physical defect. His sexual adjustment in the marriage was only fair.

The patient's health in general was good, although while in grammar school he developed severe headaches, which were not relieved by glasses. Early in high school it was discovered that the patient had a blood pressure of 145 systolic, and he was immediately limited in his athletic interests and put on a beef- and salt-poor diet for several years. This mild hypertension continued and the patient had to pay a higher insurance premium because of it.

Physical examination at the time of the psychiatric study revealed that the blood pressure then was 118/84, and the only other significant physical findings were coldness and cyanosis of his fingers and toes. X-ray and laboratory studies were within normal limits.

One quotation from the psychological test findings is remarkably significant: "The patient is psychosexually infantile with childlike, oral dependent, demanding needs and aggressions readily available for manifestation. In his phantasies the patient describes a scolding, disapproving mother figure from whom he tries to escape, but he doesn't know where to go. Crime phantasies, both passive and active, are abundant."

The patient undertook psychoanalytic treatment, and it soon became apparent therein that his passive inhibited personality masked strong hostile impulses, of which he was often conscious, but which he was usually unable to express verbally or otherwise. He was constantly in conflict over the fact that he wanted to be a big, strong, aggressive man on the one hand, and on the other hand he wanted to be a protected, dependent child. He was very fearful of his aggressive impulses which were easily stimulated by any slight to his self esteem, or any threatened loss of dependent relationships. It is to be noted that his illness began when he was separated from his wife, who was a rather aggressive, domineering individual upon whom he was extremely dependent.

When this pattern became quite clear, blood pressure observations before and after each psychoanalytic session were made for a period of several weeks, and it was observed that consistently, when the patient felt angry, which feeling might be precipitated by a disagreement with his wife, a slight at work from his employer, or some interpretation from the physician which wounded his self esteem, this anger would not be expressed at first, but he would become rather sullen, quiet and submissive and at this time he would have an elevation of blood pressure, of from 15 to 30 mm. of mercury systolic and 5 to 15 mm. of mercury diastolic. As long as his angry feelings were held in, this blood pressure elevation would be maintained, but as soon as he was able to express these feelings openly in the analytic sessions, his blood pressure rapidly returned to normal and would remain at a normal level until another similar incident.

In the course of his psychiatric treatment the patient gradually developed the ability to express his legitimate hostile feelings effectively, to become less inhibited in his social relationships and less dependent on his wife and other parent figures. Furthermore, during the course of treatment his blood pressure returned to normal and his headaches completely disappeared and apparently have not returned to this date.

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In summary, this patient was an extremely passive, dependent individual, who was over-protected but unloved in his childhood, and who developed an inability to express hostile feelings of any type for fear of reprisal and loss of dependent security. His hostile impulses were very close to consciousness, but he was unable to express them and at such times he would develop a transient hypertension. Apparently this was not a severe, chronic reaction and did not result in any irreversible anatomical changes and the condition easily subsided.

Case History

The next case to be described is that of a 33-year-old woman who came for psychiatric treatment because of depression, sleeplessness, and addiction to nembutal. She was the fourth of 7 siblings, and had a rather reserved, disinterested, strict and stingy father, and a strict, hyperactive, and overly religious mother. As a child the patient was very timid, being afraid of many things, particularly of strangers. She early developed the symptom of fingernail biting, which continued until she reached adulthood. She stated that as a child she was never happy and cried a great deal, and that she never had the desire to return to her childhood. She had many ambitions for scholastic attainment, but these were blocked by the poor financial situation of the family following the father's death. The patient then entered nurses' training, which she never liked, but forced herself to do. As a result of her regular income she became the financial mainstay of the large family. They all came to her when they were in trouble, and without any hesitation she would give freely to them of her time and money. About six years prior to her admission the patient developed a duodenal ulcer, which was healed by diet alone. Other than this, prior to the onset of her hypertension, her health had been relatively good. The patient's social life had been rather hectic and she never married, despite a few minor love affairs. After the breaking of a third engagement she drank rather heavily and her alcoholism soon became replaced by her addiction to nembutal. About 2 years prior to admission she fainted on several occasions, and on examination she was found to have hypertension accompanied by severe headaches and nervousness. One year prior to admission her blood pressure reached 220/100 and a month later, despite two weeks' rest, her blood pressure rose to 230/120. At this time she had a bilateral lumbar sympathectomy performed, without reduction either in her hypertension or in her symptoms. Her addiction to narcotics increased, her depression became worse, and as a result she sought psychiatric treatment.

At the time of admission the patient's blood pressure varied between 178/124 and 200/130. Examination of her retinal vessels revealed marked narrowing and silver wire appearance of the retinal arteries, with a 3 to 1 venous arterial ratio and slight A.V. nicking. Other physical and laboratory findings were within normal limits.

Psychological test findings revealed a significant oral fixation resembling that of reactive alcoholics, marked anxiety, and a vivid phantasy life in which aggressions were markedly present but still rather well-controlled and self directed rather than turned outward.

Psychoanalytic treatment of this patient was extremely stormy, and it was not anticipated that it would bring about any remission of her hypertensive symptoms, because of the evidence of irreversible anatomical changes. It was hoped, however,

to relieve the patient's anxiety and depression and assist her to a more effective adjustment. This was, in a measure, accomplished, but the patient's physical health continued to deteriorate and the patient died of renal failure and hypertensive changes, 6 years following her admission to the psychiatric hospital.

Summary and Conclusions

An attempt has been made in this paper to indicate the more or less characteristic psychological constellation in patients suffering from hypertension. To this end the literature has been reviewed and a summary of two typical case histories presented. Although there is a rather characteristic psychological conflict in hypertensives this does not manifest itself as a specific neurosis, but rather as a chronic emotional maladjustment. The main dynamic difficulty is one of strong dependent needs combined with strong aggressive impulses, neither of which can be expressed. No attempt has been made to ascribe primary etiological significance to these emotional conflicts.

In order to determine whether or not a given patient suffering from essential hypertension may also be suffering from significant emotional conflicts, the physician must attempt to elicit a personal as well as a medical history from the patient. Such questions as, "Are you worried about anything?" usually receive a negative reply, and such recommendations as, "Go home and take it easy" are not only usually ineffective but as a matter of fact, may be contraindicated. It is much more valuable for the physician to ask the patient to talk about himself, as a person rather than as a medical case, and discuss his relationship to his environment. This can be accomplished by skillfully directing the conversation, rather than by asking specific questions.

The admonition to "take it easy" often results in a greater inability of the patient to find reasonable outlets for aggressive feelings, should he follow this advice. Rather, it has been wisely recommended to encourage the patient to engage in physical activities within his physical limits. It has been well established that rest can often be abused with resulting increase in the hypertensive symptoms, whereas mild activity has the opposite beneficial effect.

It is felt that too much concern about the blood pressure, itself, tends to increase the patient's anxiety and to limit the treatment to too narrow a phase of the total illness. In relation to the total question of treatment, I should like to quote directly from a paper by Dr. Edward Weiss, as follows:

> "What has been done in an effort to reduce the blood pressure? Because of an ill-founded idea that protein was responsible for hypertension and kidney disease, the patient was denied meat and eggs, and especially red meat, which for some reason was looked upon with particular dread. His diet was rendered even more unpalatable by the withdrawal of salt.

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Sympathy would doubtless have been extended to this half-starved fellow, except that he was probably not able to eat anyway, his teeth having been extracted on the theory that focal infection had something to do with hypertension. Even before this, he had sacrificed his tonsils and had had his sinuses punctured because of the same theory. In case some food had been consumed, the slight colonic residue was promptly washed out by numerous colonic irrigations, especially during the period when the theory of auto-intoxication was enjoying a wave of popularity. To add to his unhappiness he was often told to stop work and exercise. Of course he was denied alcohol and tobacco, as well as coffee and tea, and as a climax to the difficulties of this unfortunate person, he may now fall into the clutches of the neurosurgeon, who is prepared to separate him from his sympathetic nervous system."

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ULCER, PHOBIA AND NARCOLEPSY*

A Case Report†

By HERBERT C. MODLIN, M.D.‡

The remarkable functional responsiveness of the human gastrointestinal tract to the individual's emotional life has resulted in abundant contributions to the literature of psychological medicine from studies in gastroenterological physiology and pathology. The peptic ulcer syndrome has become a prototype of both the broad psychosomatic approach to illness and the narrower concept of *a* psychosomatic disease.

Following the basic work of Draper, Alexander, Mittelmann, Wolf, Wolff, and others, concepts of "ulcer personality" and "ulcer conflict" have been widely accepted. Many recent articles in state and regional journals have borrowed this standard view of ulcer in explaining, debating and championing the psychosomatic trend in medicine.

The case presented here conforms exactly to the classical ulcer picture in some respects and deviates in others. Particularly interesting are the development of anxiety hysteria and narcolepsy supplementary to the ulcer syndrome. Through numerous well documented hospital charts and follow-up reports this case has been followed for fifteen years, and the interplay of the three syndromes constitutes a unique clinical story.

Case History

The patient, a white, married, foundry foreman, aged 47, when examined in 1943 complained of epigastric pain and burning, gas and regurgitation, weakness, and nervous tension.

Family History. The patient's parents, natives of England, moved to Canada when he was 5. History of the grandparents and collaterals was non-contributive. The father suffered from chronic stomach trouble and died from cancer of the stomach when the patient was 14. When he was 20 his mother died of pulmonary tuberculosis after a relatively short illness. The patient described his parents as quiet, reserved, undemonstrative and nervous. He found it difficult to characterize them separately, presumably due to his feeling of having been rejected by both.

The patient was the third of six children. The oldest brother had stomach trouble and an ill-defined heart condition, both of which appeared in his late teens. He was discharged from the Canadian Army in 1917 for these complaints, and during the following thirty years was treated intermittently for peptic ulcers. Two other brothers are living and well. Two younger sisters died in infancy.

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Personal History. The patient's prenatal period and birth were normal, but he immediately became a feeding problem. "I was puny, developed poorly, and didn't keep my food down well." Enuresis, nail biting, phobias, tics, etc. were not prominent in his childhood. During school years he felt inferior because of his asthenic build and assiduously avoided fights and contact sports. This attitude forced him to endure many insults from other children. He was self-protective, did not engage in dangerous play, and never broke a bone. He recited in class with difficulty and was painfully shy with girls. No particular hobby attracted him, and he cultivated no avocation. His adult recreation consists of the radio, newspaper, movies. A fitful interest in machines and motors prompted his choice of steam and electrical engineering as a vocation. After the war, a wanderlust carried him in rapid succession away from and back again to jobs in electrical plants, railroads, and foundries. Finally, marriage influenced him to settle down with one firm where he has remained for twenty years. While he held several jobs, he was not an irresponsible itinerant worker. Some of his changes benefited him financially. He had definite ambitions and attended night schools including Columbia University during a sojourn in New York.

No significant childhood sexual experiences remain in the patient's memory. He was always aware of a gnawing, unsatisfied curiosity about female genitalia. He began solitary masturbation at about 14 and recalls much shame and guilt particularly on one occasion when seen by his oldest brother who said nothing. He first had intercourse at age 18 while he was in the Army, and maintained sexual contact with a variety of prostitutes and casual acquaintances until his marriage. Whenever a relationship threatened to resolve in a love affair, he became uncomfortable and broke it off. He consciously avoided any female companionship involving marital possibilities because "I was reluctant to give up my freedom. I had roaming habits."

Ultimately at 33 he was led into marriage by a rather forceful woman, five years his junior. She had an independence somewhat like his own and demanded little of him except what he considered excessive sexual activity. Later, when there were two children, she gradually became short tempered and easily annoyed, and in the name of her growing family, began directing his activities more positively and naggingly.

Present Illness. The patient enlisted in the Canadian Army in 1914 and saw active combat. He suffered intervals of fear and tension, particularly during night patrols and raids in which he participated. In 1917 he was "blown up by a shell." Although not wounded he was dazed, trembling and bewildered. He was hospitalized, transferred to an English rest camp, and returned to combat after three months. Thereafter he was frequently subject to acute fear and "had a hard time keeping myself going forward. I lost my appetite and got a hard lump in my stomach." Upon leaving the Army in 1919, he obtained work in an electrical plant where a severe wheel phobia quickly developed from a repetitive impulse to throw himself into the revolving turbines. He then made the first of a long series of job changes. Subsequently a distressing acrophobia forced him to leave at least one job.

Dating from 1918 gastric distress persisted. By 1921 a syndrome of prolonged periods of post cibum epigastric pain, vomiting and tarry stools had become established. X-ray diagnosis of gastric ulcer was first made in 1933. The patient recognized, prior to 1933, definite remissions of his symptoms, and believed that exacerbations were associated with emotional tension and worry.

In October, 1933, he was first hospitalized at the Royal Victoria Hospital for an acute perforation. A simple surgical closure of the perforation was accompanied by massive collapse of one lung, due presumably to the anesthetic. During his long

convalescence gastric symptoms disappeared, tension lessened, and he gained weight. After return to his home and job, alleviation was short lived.

The patient sought readmission in March, 1934, for relief of irresistible sleeping spells and recurrence of ulcer symptoms. Examination by a neuropsychiatric consultant elicited the facts concerning his phobias and narcoleptic-like diurnal sleepiness. There was sleep paralysis involving the left side of his body but no cataplexy. The diagnosis was Gelineau's syndrome.

Another acute perforation took the patient to the hospital in April, 1935, shortly after his second child was born. He reported that during the year's interim, narcoleptic attacks had become progressively worse (several daily) to the extent that he had eschewed reading. In attempting to attenuate the uncontrollable sleepiness induced by monotonous machine work, he had changed jobs at his company. This change constituted a small promotion with greater responsibility, which he feared. On the first post-operative day of surgery for the perforation, the narcolepsy magically disappeared, and at the time of his last hospitalization in 1943, it had not returned.

The patient was readmitted five years later (1940) suffering severe gastric distress and nocturia. Bladder and kidney studies were negative as were upper G-I tract X-rays. Since 1935, marital discord had increased. Because both her deliveries had been breech presentations, his wife was adamant against further pregnancies. However, she was unwilling, as her husband suggested, to limit sexual relations; and by resorting to coitus interruptus and objectionable condoms they were mutually frustrated. The patient related that his older son, aged 9, had begun to exhibit the same retiring, shy, cautious, anorexic behavior noted in his own childhood history.

Another relapse in 1943 resulted in the patient's fifth hospitalization. He stated that during the three years following his last admission, symptoms of gastric pain, flatus, spasm, and regurgitation had been the most unremittingly severe of any period within his entire history. He described, in addition, increased tension attributable to his operating hazardous machines without adequate help and under the excessive stress of war production demands. He could manage his work, but became an invalid upon returning home each night. He was not conscious of his previous phobias which had apparently faded gradually within the past 5–8 years, nor was he troubled by sleepiness. He presented an alert, cooperative appearance, and after two weeks of ulcer therapy in the hospital, was cheerful and relatively uncomplaining. X-ray studies exposed no gastric or duodenal pathology; gastric analysis and stool examinations were negative. Because of his long record of distress and perforation and the paternal history of carcinoma, subtotal gastrectomy was proposed. The patient consented promptly; the operation was performed; convalescence was uneventful.

Physical Examination. Aside from abdominal signs, no significant abnormalities were noted on the various hospital charts. The patient was 5′10″ tall, usually weighed about 135 lbs. and had a scaphoid thorax.

Laboratory Studies. Abnormal leukocyte counts, gastric contents and stools typical of active ulcer were repeatedly noted. The only extraneous laboratory findings were BMR's of −20% (1934) and −22% (1943). Various blood studies, carbohydrate and insulin tolerance tests, blood chemistry (Na, Ca, K, cholesterol), spinal fluid examination, skull films, electroencephalographs (with basal lead), etc. were well within normal limits. Most of these tests had been made incident to one or another of his hospitalizations, but all were repeated in 1943.

Follow-up Report. The history thus far recorded was obtained in 1943. Recently, through efforts of Dr. W. D. Ross and Miss Agnes Emard of the Social Service department, a five-year follow-up inquiry was made. After his gastrectomy in 1943 the patient left his heavy physical work for a clerical position which he likes even to the

extent of doing ungrudging overtime. Abdominal pains and aches persist, chiefly concomitantly with worry over home or job. He still feels sure that his gastric distress has always been on a nervous basis. His only habitual food idiosyncrasy is pork.

The social worker states, "The patient's closest friends seem to be those who are willing to discuss his condition with him. He has a few companions at work who seem to have the same gastric condition as he and he 'just enjoys talking to them.'"

A very significant point in the 1948 report is the return of his narcolepsy. He could not give a definite date of recurrence, but for the past three years at least hypersomnolence has again consistently interfered with his work and occasional recreation. His fellow employees are accustomed to rousing him from sleep, and his 17 year old son finds him a dull companion at ball games because "Dad sleeps most of the time." Apparently he can remain awake while active on his feet, but irresistible drowsiness accompanies many sedentary activities. In 1947 he tried anti-sleep medication prescribed by his family doctor but only for a few days because "it caused stomach pains."

It appears that his wife has acquired firm domestic control and frequently neglects consulting him in planning family matters. The social worker noted that "several times during their (joint) interview he was impatient and asked her for his turn to say a word."

His thirteen year old daughter is "the opposite of her brother, therefore independent, aggressive and disobedient." The mother laments her inability to make her daughter a nice girl, and her son is obviously her favorite. The patient reiterated his 1940 statement that the son is "high strung and will become like me." The girl, with a special inclination toward her father, is openly jealous of her mother. The neurotic currents among these four people are undisguised.

In summarizing his life the patient opines that since being "blown up" in the war he has "never been well or free from trouble and pain."

Recapitulation

Following is a recapitulation of significant facts in this history:

1. Strong hereditary ulcer predisposition (father, brother).
2. Asthenic body build.
3. Feeding difficulties in infancy; always delicate and underweight.
4. Undemonstrative, rejecting parents.
5. Chronic gastric invalidism of males in his environment; a self-preoccupied, demanding father and a weak, semi-invalided older brother.
6. Dominance of the mother in the family constellation.
7. Fearfulness, self-protectiveness, non-aggressiveness, shyness in childhood associations.
8. Development of an independent, self-sufficient fiction as a defense against his frustrated dependent needs.
9. Destitution of avocational, recreational or cultural resources.
10. Occupational ambitiousness; studied and worked overtime without, however, notably advancing himself.
11. Heterosexual inhibition, fear of marriage.
12. Marriage at 33 to independent, dominating woman.
13. Onset of persistent anxiety during combat in World War I.

14. Onset of epigastric discomfort in last months of war.

15. Onset of phobias (wheels, high places) after Army discharge.

16. Marked increase in ulcer symptoms following marriage.

17. Onset of narcolepsy with first perforation after three years of marriage, birth of first child and increasing dominance of wife; disappearance of narcolepsy following surgery for second perforation.

18. Recurrence of narcolepsy following gastrectomy.

19. Fading of phobic symptoms with increasing severity of ulcer problem.

20. Increasing acting out of forced independence from childhood until 33. Increasing emotional subjection to wife after age 33 coincident with aggravated ulcer syptoms and intermittent hypersomnolence.

The psychological mechanism for peptic ulcer formation which is found most commonly in the literature follows the classical description of Alexander.[1] Additions have been made by Mittelmann and Wolff;[2] and Wolf and Wolff[3] among others. In Alexander's words the patient's conscious attitude is "I am efficient, active, productive; or I give to everybody, help people, assume responsibilities." Actually the opposite attitude, an extreme and violent craving for love and the need for dependence and help, rules his unconscious. The typical ulcer patient[2] is assertive, independent, self-sufficient, ambitious to succeed. He seldom admits anxiety and superficially is well adjusted.

Alexander believes this rejection of dependent needs is an overcompensation for a sense of inferiority and guilt. Mittelmann and Wolff found anxiety, frustration, resentment, guilt, and self-condemnation under the assertive, independent façade.

This patient, denied satisfaction of oral cravings in infancy and childhood, unloved by an invalided, egocentric father and a rejecting mother, attempted to achieve the "ulcer façade." When it collapsed during severe combat experiences, he was once more the self-protective, non-aggressive boy. As Mittelmann and Wolff state, "The patient had evolved an almost adequate pattern for dealing with anxiety and then, through some life incident, was thrown into a disorganized anxious state."

Personally catastrophic events in the War produced in this patient a chronic anxiety state. Upon return to civilian life he attempted to reestablish an independent existence which he insisted he preferred and was loath to relinquish. Anxiety hysteria and narcolepsy psychosomatically refuted his conscious attitude.

The patient finally could stand alone no longer and submitted in marriage to a forceful mother figure. His wife's demanding, non-giving attitude suggests a repetition of the childhood pattern of frustration. In spite of his marital disillusionment, he demonstrated emotional bondage to his family in foregoing his former vacillating work habits to become a steady breadwinner.

Narcolepsy has recently been described in psychosomatic terms as occurring in passive-dependent personalities who resent the life pattern in which they are caught[4] or who are inclined toward a general withdrawal from conflict with reality.[5] This patient's decision to cling to his marriage for the sake of what emotional support it gave him rather than to expend aggressive effort in altering circumstances, is consistent with his retreat into hypersomnolence.

The strongly dominant alpha rhythm of the EEG also attested the basically dependent nature of this man and his manner of accepting his life role. Saul, Davis and Davis[6] have shown this EEG pattern to be characteristic in personalities able to accept their passive-dependent attitudes without defensive reaction-formation. Rubin and Bowman[7] corroborated this finding in ulcer patients of the same type.

It would appear that this patient maintained with difficulty a self-sufficient front which gave way many times to reveal a frankly passive-dependent substructure. Acute anxiety precipitated by war stress engendered chronic anxiety which was nourished by a lifelong accumulation of insecurity, inferiority, frustration and resentment; which was insufficiently released in phobic symptoms; and which severely activated his hereditary and constitutional predisposition to ulcer formation. He was impelled, by not quite explicable inner forces, to abandon his long fought battle for independence and retreat consistently toward a dependent position. He clung tenaciously to a barely tolerable marriage, attempted passive withdrawal into narcolepsy, and readily consented to gastrectomy with acceptance of consequent invalidism. Relinquishment of the phobias is suggestive of a diminution of anxiety which after all might be attributable to a modicum of support from his marriage.

This patient's many lapses into overt passivity are atypical of the "ulcer personality" although the conflict situation is typical for the disease. Relevant to this Alexander found that "in two recently observed cases of *severe recurrent ulcer*, the extremely strong oral receptive cravings were not successfully repressed or overcompensated, but appeared more openly in consciousness. The history of both of these cases showed early and extreme oral deprivation in childhood. It seems that their real sufferings in childhood and in later life made it possible for these patients to cling more openly to their receptive claims."

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VARYING HYPNOTIZABILITY IN A CASE OF PARKINSONISM*

By H. WALDO BIRD, M.D.†

That direct hypnotic suggestion can effect inhibition of the tremor of a Parkinsonian patient is of considerable interest and significance in psychosomatic theory. Interest in the example to be cited is heightened by the discovery that the tremor appeared abruptly at a time of stress and by finding that the patient's susceptibility to hypnosis was variable.

An attempt at elucidation of the dynamic factors underlying these findings is embodied in the following case study.

Case Report

A middle aged, white, divorced, radio operator was admitted to the hospital because of painful muscular rigidity and tremor of the right arm.

Historical Background. The patient is the youngest of eight siblings, born to a domineering, hard-driving, opinionated Michigan farmer and his kindly subservient wife. As a child, he attempted repeatedly to compensate for his inferior position in the family through competitive, aggressive behavior. At age four, when denied a trivial request by his father, the boy spitefully broke several dozens of freshly gathered eggs. He was always ready to battle his brothers and sisters for a share of the meager supply of candy and toys. Because of the mutually deep attachment between the patient and his mother, he knew that her aid could be successfully enlisted if his own efforts failed.

When the patient was eight years old, the poverty-stricken family was forced to seek shelter with relatives in Iowa. The ensuing two years were marked by privation, and the embittered father insisted that all his children work long hours in the fields. Disobedience invited a sound thrashing. By the time the patient was ten, the father had turned to selling automobiles over a wide area and, as a consequence, was separated from his family for long periods. Upon returning home between business trips, the father often decided that the children, especially the patient, had been overly indulged by their mother in his absence and immediately took drastic disciplinary steps.

The patient became an excellent student in school and was active in all sports. On warm Sundays, he customarily walked to a swimming hole five miles away from home. After the age of 14 he engaged frequently in sexual relations with casual female acquaintances. With an improvement in the father's financial status, the family moved to the city where the patient completed two years of high school. At this point, he felt the lure of the distant lands described in his textbooks and made up his mind to go to sea, but was "influenced" by his father to study wireless telegraphy for six months. A year later, when promised assignment as a radio operator by a persuasive recruiting sergeant, he impulsively joined the Army. Disappointed

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at finding himself assigned to the military police the patient promptly absented himself without leave, and finally secured his release from service because of flat feet. A small pension was awarded him. Shortly thereafter, he married a girl at the end of a two-week courtship and moved into his parents' home. A few weeks later, the father announced that the couple could reside with him only a limited time. This was followed by the wife's demand that the patient look about for work. He became enraged at this turn of events, deserted his wife, and shipped out aboard a tramp steamer. A divorce was granted the following year.

The next several years were largely spent at sea as a radio operator. The patient jumped ship on numerous occasions after becoming involved in arguments with the ship's captain and worked as a laborer for short periods. On each return to the United States, he appealed for an increase in his pension. When 22, he was hospitalized with high fever, variously diagnosed as malarial and influenzal, during the course of which he was comatose for two days. Upon returning home for a brief stay, the patient found his father destitute and a confirmed alcoholic since the stock market "crash." Numerous fist-fights ensued between father and son, usually precipitated by the former's abuse of the mother.

The patient did not visit his parents again for 5 years. After one year of desultory farming and constant conflict with his father, he set out for Washington in a renewed attempt to secure a larger pension. On the trip, he sought overnight lodging in a soldiers' home and stayed on for six months. After arriving at his original destination and filing the appeal, he entered a second soldiers' home where he remained until inducted into the Army three years later, despite the observation that he was somewhat tense, undernourished, and had a bland facial expression. The patient is inclined to believe that an argument over a debt with a member of the local Selective Service Board was the direct cause of his being drafted.

Present illness. While serving as radioman on board a military vessel en route to the Azores, the patient was hurriedly ordered by the captain to dispatch a distress message following the discovery of an unidentified submarine. Paralyzed with fear, he found that he could not manipulate the wireless key because of the sudden development of a violent tremor of the right and dominant hand. When the danger had passed, the patient became calm but noted that this tremor persisted in milder form almost continuously. On two subsequent voyages, the trembling made it impossible for him to perform his duties. One month after onset of the symptom, he was admitted to a hospital where the musculature of the right arm became mildly rigid, and a diagnosis of paralysis agitans was made. Before separation through medical channels, the diagnosis was changed at a second hospital to conversion hysteria.

The unilateral tremor and rigidity progressed in severity. The patient supplemented his pension by purchasing the neighbors' crops which he managed to resell at a small profit. Dissatisfied as before with his compensation, he sought to have the amount increased immediately before entering the hospital (3 years after discharge from service).

Examinational Data. General physical examination revealed bilateral pes planus. Neurological examination disclosed infrequent blinking of the eyes, monotonous speech, expressionless facies, and a coarse, violent, rhythmic tremor of the right hand and forearm. The adventitious movements disappeared during sleep and patterned activity. In the resting position, the right arm and leg were semiflexed at the elbow and the knee. Bradykinesia, cog-wheel phenomenon, and rigidity were present in the right upper extremity and to a lesser degree in the right lower extrem-

ity. The gait was marked by a right-sided limp resulting from sudden giving-way of the knee with each step. The right biceps reflex was somewhat diminished while the right knee jerk was hyperactive. The remainder of the examination disclosed no abnormalities.

All routine laboratory examinations were negative. Electromyographic studies revealed regular 4.5 cps tremor bursts occurring in the biceps, triceps, and flexor and extensor muscle groups of the forearm. These bursts appeared asynchronously in the agonists and antagonists. During both active and passive motions, there occurred significantly greater than normal antagonist activity. Spinal fluid examination and oxyencephalogram performed prior to pyramidotomy were normal.

During the period of evaluation following admission to the hospital, the patient was described as being guarded, anxious, alert, jocular and extremely curious. Productions were circumstantial, moralistic and intellectualized. Thought content centered about the dual possibilities of undergoing surgery for relief of the tremor and of obtaining increased compensation, as, "I am 100% disabled." He could never bring himself to express directly the hostility obviously felt toward the father. Emotional tone was somewhat flattened although in general appropriate to environmental stimuli. Relations with his associates were marked by jovial deference which lacked warmth. Orientation and memory were intact. Judgment and insight were slightly impaired. There was no evidence of delusions or extrasensory perceptions.

The psychological test results described a highly narcissistic, passive, demanding person of average intelligence who, unable to accept his passive-dependent needs, assumed a revengeful attitude and fought against his physically dependent position. There were evidences of deeply ingrained negativism and hostility from which projective tendencies appeared to be developing. A close but ambivalent relationship between the patient and the mother figure was felt to exist. Overt aggression was expressed toward father figures.

Hospital Course. It was noted that the tremor was markedly exacerbated by stress, during conversations, and when the patient's attention was drawn to the symptom. In order that the importance of psychogenic factors might be evaluated, it was suggested to the patient that he be hypnotized. Thereupon, he expressed concern, holding that the "weak-minded" alone were hypnotizable. Only after the implication had been made that successful response to hypnosis would to a degree reflect a desire to cooperate, did he accede. The subsequent attempt by another therapist resulted in the production of a light hypnotic state with persistence of the Parkinsonian movements. The following day, two attempts at hypnosis met with failure.

Tremor Abolished under Hypnosis

Four months after admission, the author assumed the hospital care of this case. Because of the patient's inability to tolerate therapeutic doses of the belladonna alkaloids, it was decided to resume hypnosis in an effort to alleviate tremor and rigidity. This purpose was carefully explained to the patient and his cooperation enlisted. For the next three months, hypnosis was carried out on an average of twice weekly. The trance was readily induced, but the level attained, as determined conventionally, was never more than moderate in depth. The producible phenomena consisted of forced closure of the eyes, extremity levitation, slight variations

in skin sensation, but only partial amnesia for the preceding trance. Two attempts at abreaction into the scene on shipboard met with minimal success and post-hypnotic suggestion was performed on but one occasion. Parenteral prehypnotic sedation had no deepening effect. It was regularly possible by direct suggestion to abolish the tremor and diminish muscle rigidity for periods up to one-half hour in length, and these signs reappeared following an appropriate signal. In some instances, a brief latent period intervened between the signal and the response. On several occasions, the tremor disappeared spontaneously after the trance had been entered. As a control technique, he was observed in the waking state. Neither voluntarily nor in response to the identical suggestions, as were used during the hypnotic state, could he control the tremor for more than 15 seconds. An electromyographic tracing recorded the inhibition and reappearance of the typical Parkinsonian tremor bursts in response to direct hypnotic suggestion.

Paradoxical Response to Suggestion

In the 6th month of hospitalization the patient demanded that neurosurgery be performed, but refused to undergo the essential preliminary lumbar puncture and oxyencephalography. Therefore, in a further attempt to combat the increasingly painful rigidity, intramuscular injections of curare in oil were given. After developing transient motor paresis, to which he reacted indignantly and with inordinate apprehension, the patient suddenly insisted that the program proposed by the neurosurgeon be carried out. He concurred in the recommendation that the air encephalogram be performed under hypnosis to reduce attendant discomfort.

Accordingly, he was rehypnotized on eight occasions in preparation, never attaining more than a superficial trance. The patient awoke spontaneously from the hypnotic state twice and, denying that he had just been hypnotized, referred to the procedure as a "lot of hocus-pocus." In the waking state, he was then able to inhibit the tremor voluntarily for as long as five minutes. The tremor no longer disappeared under hypnosis, and a paradoxical response to suggestion was observed. More violent trembling followed the direct suggestion that the tremor should subside, and it diminished markedly when the signal was given to increase the amplitude. This altered response was clearly seen in an electromyographic tracing. A simultaneous four-lead electroencephalogram revealed a moderate degree of hypnotically induced relaxation. Psychological evaluation accomplished during this period demonstrated overalertness, constriction, caution, and a general increase in mental efficiency. Rejection of dependence on males, a more negative attitude toward the doctor, and an in-

creased demand for the mother's undivided attention were masked by a superficial show of independence.

Oxyencephalography Performed under Hypnosis

In the 11th hospital month, on the day preceding air study, an attempt at induction succeeded surprisingly well. The following morning the patient, routinely premedicated, was placed in a light trance and reassured that he would experience a minimum of discomfort thereafter. Tremor at once diminished markedly. During the procedure, minor complaints disappeared promptly following appropriate suggestion, and the patient did not develop nausea, pallor, or alterations in the vital signs. Post-hypnotic suggestion reduced post-operative distress to a minimum as compared with the usual case, and he later expressed gratitude that he had been hypnotized.

Refractory to Hypnosis

A pyramidotomy was performed by Dr. Leon Bernstein, which markedly allayed the tremor and rigidity. Nevertheless, the obvious improvement in motor functioning was minimized by the patient, who often expressed doubt both as to whether he would ever feel well enough to leave the hospital and as to what kind of work he should try if he did elect to leave. Paranoid material was expressed with less restraint than before, and he refused to commit himself on any issue if he thought that notes might be taken. Yet the patient readily consented to undergo hypnosis. However, he suddenly opened his eyes during each of six attempts at induction and smiled triumphantly. He denied once again that he had ever been hypnotized, insisting that "weak-mindedness" makes for susceptibility to hypnosis. Psychological tests performed following pyramidotomy revealed a noticeable improvement in visual-motor coordination. The striking feature of the last battery was the increased effectiveness of his control over dangerous effects and impulses. He appeared to be reverting to his premorbid personality, a mildly schizoid person who maintained a front of pretentious intellectualizing and in whom projection and obsessive indecision were prominent.

During the last month of his hospital stay, the patient received notification that the extent of his disability warranted a significant increase in compensation. Thereafter, he made plans for convalescing at home. A final attempt at hypnosis was unsuccessful.

Discussion

With the clarification of the role played by inhibited aggression, the psychodynamics of Parkinsonism came to a fuller understanding. Booth[1]

found the potential Parkinsonian personality to be characterized by an aggressive drive toward external action with the locomotor system as executive organ. This same author saw in the tremor of Parkinsonism an urge to activity for its own sake, and felt that muscular rigidity represented a balance between aggression against obstacles and submission to restrictive influences. Jelliffe[2] conceived of the tremor as representing a motor reaction to dammed-back, unconscious hostility. In this case, the anamnestic data are replete with evidences of aggressive behavior and reliance on the muscular system. In addition, attention is focused on the hostility immanent in the father-son relationship.

Gradual onset is commonly held to be characteristic of the Parkinsonian syndrome. Booth noted that the traumatic conditions which imposed a serious handicap on the personality had been in effect for at least a few months before the onset of clinical symptoms. This patient's incapacitating tremor, however, developed immediately under stress, thereafter abated for a time, and finally became fixed in severity. The tremulousness at its inception may have represented a primarily psychogenic reaction and only incidentally later became an expression of disordered extrapyramidal functioning. It is far more likely that a latent dysfunction of nervous pathways, pathologically conditioned by the earlier febrile process, manifested itself with the sudden need to discharge overwhelming anxiety. Thereupon, ego equilibrium was further menaced by the awareness of damage to the highly prized neuromuscular system which served to channel the bulk of the aggressive impulses into motor activity. A vicious circle entailing the discharge of anxiety was thereby set into motion.

It is generally conceded that paranoid trends are an obstacle to successful hypnosis. Brenman and Gill[3] cite the case of an individual whose latent paranoid ideation was stimulated through the use of hypnosis in a manner which might have led to a psychotic break. In the current case, where efforts were largely confined to direct suggestion, the continuation of the hypnotic procedure itself in the presence of latent paranoid material did not give evidence of further disturbing the basic personality structure.

The case under consideration supports the view that symptoms of what is commonly described as an organic syndrome can be modified under hypnosis. Schilder and Kauders[4] have likewise commented on the futility of attempting to distinguish between symptoms of organic disease and those of neurotic origin through the use of hypnosis. However, these authors are of the opinion that "profound hypnosis is a rule necessary in influencing organic symptoms." By conventional standards, this patient never entered a deep hypnotic level. This evident discrepancy can be resolved by considering that degree of hypnotizability bears no direct relationship to what is termed the "psychic depth" of hypnosis. Brenman and Gill,[3, 5]

in this connection, feel that therapeutic success depends largely on the extent of the subjects emotional participation in the hypnotic experience. It would appear that this seemingly lightly hypnotized patient was able to attain significant psychic depth through the essential emotional involvement in the relationship during the two indicated periods of his hospitalization.

The varying hypnotizability is an intriguing feature of this presentation. The fact that susceptibility to hypnosis is not a static state that consistently appears under any and all conditions has recently been emphasized.[6] In addition to whatever other characteristics it may possess, the hypnotic state is clearly a unique and intimate interpersonal relationship. Our present knowledge does not establish definitely the essential nature of this relationship in terms of conscious or unconscious gratifications met, nor does it assess conclusively the significance of the interplay between psychologic and neurophysiologic mechanisms. Any effort at explanation of the variation in the hypnotizability of this patient meets these barriers as well as difficulties posed by his guarded attitude. The anamnesis describes a passive-aggressive personality, who managed with partial success the chronic inhibition of aggression through muscular expression. The hospital course, on the other hand, is marked by a changing emphasis on conscious motivational factors with which the different susceptibilities to the induction of the trance can be roughly correlated.

By statements that only the "weak-minded" are hypnotizable and that hypnosis is "hocus-pocus," the patient, who was struggling against his passive needs, demonstrated that he entered the hypnotic relationship with conscious reservations. In the first phase of hypnotizability, stress was placed on the value of cooperativeness, an essential prerequisite to successful hypnosis. The need to cooperate derived from positive conscious motivation in the direction of obtaining increased compensation and of seeking relief from physical discomfort. This apparently made for susceptibility to hypnosis in the early period and again during the air study.

Certain factors can be introduced to account for the altered response to hypnosis following curarization. The negative effect on the transference state resulting from the development of an unpleasant reaction to a drug prescribed by the hypnotist played a significant role. Complete muscular relaxation was intolerable to this patient because it derived from physiologico-chemical interference to the expression of aggression through neuromuscular channels. This was followed by hostile indignation, clearly delineated also by psychological testing, which at the outset served to oppose the hypnotist's purpose. In addition, the patient felt consciously that surgery should be undertaken and could not accept the hypnotic procedure which had assumed the significance of a palliative substitute technique.

It is interesting that even a light hypnotic trance was inducible in the face of these detrimental influences. In all probability, the patient could not bring himself to resist hypnosis totally for fear of antagonizing the hypnotist too greatly; yet the negativism is reflected in the paradoxical responses to suggestion. The psychodynamic balance of this hypnotized person seems to have been such that hypnotic suggestion could fail within the hypnotic trance.

It is noteworthy that after the operation, the patient gave little more than lip service to the improvement in his condition. This suggests that the symptoms had served the unconscious function of making a case for accepting dependent gratification and secondary gain. The diminution in the disability must have, therefore, aroused hostility which again interfered with successful hypnosis. Further, there no longer existed the former conscious motivation to participate in the experience. His final assertion that he had never been hypnotized demonstrated the then regnant efficacy of the conscious drive to obstruct hypnosis by attempting to deny the existence of those wishes which had previously made for successful hypnosis.

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BOOK REVIEW

Psychiatry in a Troubled World. By WILLIAM C. MENNINGER. Price $6.00. Pp. 607. New York, MacMillan Co., 1948.

This work should find a quick and extensive acceptance as a key reference on most subjects relating to psychiatry in World War II and the post-war period. That it was published within two years after the author was separated from the Army deserves a tribute best understood by those who were in the armed services. Over 600 references and an index with more than 1200 items will promote its usefulness to students of mental health as well as furnishing interesting reading to those who participated in the arduous period described. In a comparatively brief space the author describes most, if not all, of the major issues, together with appropriate background material, relevant to the functions of psychiatry in the armed services in World War II. The 23 chapters of Section I invite comparison with Vol. X, "*The Medical Department of the United States Army in the World War*," U. S. Government Printing Office, Washington, D. C., 1929.

The long uphill fight for psychiatry to exert its proper functions at all levels from the company area and dispensary to policy-making in the War Department is well documented and is a thrilling story in spite of the many failures and disappointments. Undoubtedly other writers will amplify the many similarities and differences between World War I and World War II, already pointed out by the author, but each reader can supply for himself the conclusions justified by his own experience. The panorama is too broad, and the time elapsed too brief, to write critically with the perspective which comes with distance from the scene of action. However, every soldier will have genuine reason to feel that the mental health problems of 1940–46 and their management have been presented accurately.

Section II, entitled "In Peace," comprising 186 pages, is an omnibus discussing civilian psychiatric problems with the knowledge gained through wartime experience. Especially strong are the chapters on "Defects Revealed in Civilian Medicine," and "Needed Changes in the Army."

There are four appendices containing a) army publications and circulars, b) nomenclature, c) characteristics and attitudes of the soldier in World War II as reported by the Information and Education Division of the Army, d) reference data about Army personnel in the war.

The vast enterprises reported in this volume make clear that psychiatry has become a responsible function at both the basic science and top administrative levels. The author is well equipped by training and successful experience to help the former "Cinderella of Medicine" assume its proper place with the other sciences which deal with the control of human behavior. His hard-headed common-sense and steadfast optimism about the ability of man to control his destiny much more than has been apparent heretofore lends a dignity to the material which will be a real source of support to the reader. Although the challenge is acute, there are means to provide mastery.

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